

Geothermal Energy Project Brief

California Energy Commission

June 2002

City of Susanville Geothermal District Heating System

PURPOSE

To provide space and domestic water heating to customers in the City of Susanville, Lassen County, California, using geothermal resources

FUNDING AND OWNERSHIP

The California Energy Commission provided co-funding for drilling, construction, and evaluation of disposal options to support development of the City's district heating system. A private individual owns one of the wells and provides fluids to the City on a contract basis, and the City owns the second well. The City operates and maintains the entire system.

| | |
|----------------------------------|--------------------|
| Awards to the City of Susanville | \$1,075,014 |
| Match funds, City of Susanville | <u>273,092</u> |
| Total | \$1,348,106 |

GEOHERMAL RESOURCE AND SYSTEM DESIGN

The two wells are 560 feet and 900 feet deep and provide fluid at temperatures of 156 and 172 degrees F, respectively. The average flow rates are about 500 GPM and 300 GPM. The exceptionally clean fluids are discharged into surface channels.

The City of Susanville geothermal system came online in 1982 and serves about 30 residential

and commercial buildings, including one apartment building that has 35 units.

SAVINGS AND PAYBACK PERIOD

The City estimates a simple payback period of about nine to eleven years for those who connect to the system. In the past, the City marketed the system extensively, but now the program is operated at a minimal cost.

The City estimates that the system provides a one-third savings over using fuel oil. Natural gas has recently been installed in the Susanville area, however no existing geothermal customers have switched to natural gas, indicating a high level of satisfaction with geothermal energy provided by the City through its district heating system.

For more information on this project, contact:

Louie Templeton
Director of Public Works
City of Susanville
(530) 257-1041

Elaine Sison-Lebrilla
California Energy Commission
1516 Ninth Street, MS-43
Sacramento, CA 95814-5504
(916) 653-0363

Gray Davis, Governor
Mary D. Nichols, Secretary for Resources

CALIFORNIA ENERGY COMMISSION

William J. Keese, Chairman
Robert Pernell, Commissioner
Arthur Rosenfeld, Commissioner
James D. Boyd, Commissioner
John L. Geesman, Commissioner
Steve Larson, Executive Director

